



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

FEB 07 2012

Paul Moosey, P.E.
Assistant Commissioner - Engineering and Architectural Services
Worcester Department of Public Works & Parks
20 East Worcester Street
Worcester, Massachusetts 01608

Re: PCB Cleanup and Disposal Approval under 40 CFR §§ 761.61(a) and (c)
and § 761.79(h)
North High School
140 Harrington Way
Worcester, Massachusetts

Dear Mr. Moosey:

This is in response to the City of Worcester Department of Public Works & Parks (DPW&P) Notification¹ for approval to clean up and dispose of PCB-contaminated building materials in the former North High School (the Site) located at 140 Harrington Way in Worcester, Massachusetts. The Site contains caulk and other building materials that exceed the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20(a), § 761.61, and § 761.62.

In its Notification, DPW&P has proposed the following PCB cleanup and disposal plan:

- Remove and dispose of all *PCB bulk product waste* (e.g., caulk, varnished wood floors, metal window frames, painted metals) in a state permitted landfill in accordance with § 761.62(b) or § 761.62(d);
- Remove and dispose of *PCB remediation waste* with greater than or equal to (\geq) 50 parts per million (ppm) (e.g., brick) at a TSCA permitted disposal facility or RCRA hazardous waste landfill in accordance with § 761.61(a)(5)(i)(B)(2)(iii);

¹ The notification was submitted by DPW&P to satisfy the notification requirements under 40 CFR §§ 761.61(a)(3) and (c). Information was submitted dated September 2011 (Self-Implementing PCB Remediation Waste Cleanup and Disposal Plan (SIDP)); November 29, 2011 (Revised SIDP); January 11, 2012 (email supplemental information to SIDP regarding waste disposal); January 23, 2012 (email Response to EPA comments); January 30, 2012 (email timing for MassDEP approval for waste disposal); and, January 31, 2012 (email landfill permit for disposal of *Excluded PCB products*). These submittals shall be referred to as the "Notification".

- Remove and dispose of *PCB remediation waste* with less than ($<$) 50 ppm (e.g., brick, stucco, concrete, soils) at a state permitted landfill in accordance with § 761.61(a)(5)(i)(B)(2)(ii) and § 761.61(a)(5)(v)(A); and,
- Conduct verification sampling to confirm that the PCB standards for cleanup and disposal have been met.

DPW&P has determined that certain building materials (e.g., caulk, floor tile mastic, cove molding) which have PCB concentrations at < 50 ppm, meet the criteria for an *Excluded PCB product* under § 761.3. Under the PCB regulations, *Excluded PCB products* are authorized for use and thus there is no requirement for removal of these products. However, as part of the demolition project and as indicated in the Notification, the *Excluded PCB products* will be removed and disposed of in a state permitted landfill.

With the exception of the proposed verification sampling frequency for structural concrete, the Notification meets the requirements and standards established under §§ 761.61(a), 761.62, and 761.79 for cleanup and disposal of *PCB remediation waste* and *PCB bulk product waste*.

DPW&P has proposed a deviation from the verification sampling frequency for structural concrete; verification samples for soil cleanup and for brick segregation and disposal will be collected in accordance with Subpart O. Based on the characterization sampling results and the proposed removal plan, the proposed alternative verification sampling frequency for the structural concrete appears reasonable. EPA has determined that the alternative sampling frequency will not present an unreasonable risk to public health or the environment and EPA may approve the alternative sampling frequency under § 761.61(c).

DPW&P may proceed with its cleanup in accordance with 40 CFR § 761.61(a); § 761.62; § 761.79(h); its Notification; and this Approval, subject to the conditions of Attachment 1. Please note the following conditions in Attachment 1:

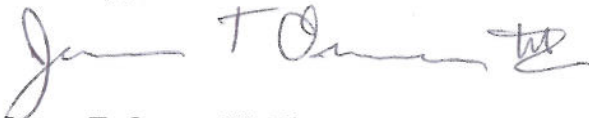
- Condition 1a. With respect to disposal of painted concrete block walls which have asbestos fireproofing insulation, DPW&P is proposing to collect additional paint samples to support disposal of the painted concrete block walls as an *Excluded PCB product*. This condition requires submittal of the additional characterization sampling results for the paint. In the event that the paint samples indicate PCB concentrations ≥ 50 ppm, the submitted results should also include DPW&P's plan for disposal of the painted concrete block walls.
- Condition 1b. In the Notification, DPW&P indicated that certain painted PCB-contaminated concrete block walls will be disposed of in accordance with § 761.61(a)(5)(v)(A) and § 761.62(d) pending a Beneficial Use Determination (BUD) permit from the Massachusetts Department of Environmental Protection (MassDEP). This condition requires DPW&P to submit a copy of the BUD approval to EPA. In the event a BUD is not approved, DPW&P shall submit its plan for disposal of these interior painted concrete block walls.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in dark ink, appearing to read "James T. Owens III", with a stylized flourish at the end.

James T. Owens III, Director
Office of Site Remediation & Restoration

cc: Mark Richards, Tighe & Bond
MassDEP, Central Region
File

Attachment 1: PCB Approval Conditions

ATTACHMENT 1:

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
NORTH HIGH SCHOOL ("the Site")
140 HARRINGTON WAY
WORCESTER, MASSACHUSETTS**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site and identified in the Notification.⁽²⁾
 - a. The City of Worcester Department of Public Works & Parks (DPW&P) shall submit the results of the additional characterization sampling for painted concrete block walls with asbestos fireproofing insulation to EPA. In the event the samples indicate a greater than or equal to (\geq) 50 parts per million (ppm) PCB concentration, DPW&P also shall submit its plan for disposal of these wastes.
 - b. DPW&P shall submit a copy of the Massachusetts Department of Environmental Protection (MassDEP) Beneficial Use Determination (BUD) permit for management of painted concrete block walls (classified as a *PCB bulk product waste* and *PCB remediation waste*.) In the event MassDEP denies the permit, DPW&P shall submit its plan for disposal of these wastes.
2. DPW&P shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. DPW&P must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, DPW&P shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.

² The notification was submitted by DPW&P to satisfy the notification requirements under 40 CFR §§ 761.61(a)(3) and (c). Information was submitted dated September 2011 (Self-Implementing PCB Remediation Waste Cleanup and Disposal Plan (SIDP)); November 29, 2011 (Revised SIDP); January 11, 2012 (email supplemental information to SIDP regarding waste disposal); January 23, 2012 (email Response to EPA comments); January 30, 2012 (email timing for MassDEP approval for waste disposal); and, January 31, 2012 (email landfill permit for disposal of *Excluded PCB products*). These submittals shall be referred to as the "Notification".

6. DPW&P is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time DPW&P has or receives information indicating that DPW&P or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by DPW&P are authorized to conduct the activities set forth in the Notification. DPW&P is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release DPW&P from compliance with any applicable requirements of federal, state or local law; or 3) release DPW&P from liability for, or otherwise resolve any violations of federal, state or local law.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from DPW&P of its acceptance of the conditions of this Approval within 10 business days of receipt.
10. DPW&P shall submit the following information for EPA review and/or approval:
 - a. a certification signed by its selected contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
 - b. a contractor work plan, prepared and submitted by the selected demolition or abatement contractor(s) describing the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
 - c. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical methods and quality assurance requirements specified in the Notification and in this Approval.

CLEANUP AND DISPOSAL CONDITIONS

11. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
12. PCB-contaminated materials shall be decontaminated and confirmatory sampling and analysis shall be conducted as described below:
 - a. All visible residues of PCB caulk (i.e. *PCB bulk product waste*) shall be removed as described in the Notification.
 - b. The cleanup standard for *porous surfaces* (e.g., *concrete and brick*) classified as a *PCB remediation waste* shall be less than or equal to (\leq) 1 ppm for unrestricted use or disposal; less than ($<$) 50 ppm for disposal in accordance with § 761.61(a)(5)(v)(A); and, greater than or equal to (\geq) 50 ppm for disposal in accordance with § 761.61(a)(5)(i)(B)(2)(iii).
 - i) All verification sampling for *porous surfaces* shall be performed on a bulk basis (i.e., ppm) and reported as a dry weight analysis. Verification sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches. Verification sampling shall be conducted in accordance with the Notification, as applicable.
 - ii) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.
 - c. The PCB cleanup standard for ground surfaces (e.g., soils) shall be \leq 1 ppm.
 - i) *Bulk PCB remediation waste* samples (e.g., soils) shall be collected on a bulk basis (i.e. mg/Kg) and PCB analytical results shall be reported on a dry weight analysis.
 - ii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.

13. All PCB waste (regardless of concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with § 761.40; stored in a manner prescribed in § 761.65; and, disposed of in accordance with 40 CFR § 761.61(a)(5) or § 761.62, unless otherwise specified below:
 - a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

14. DPW&P shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by DPW&P to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
15. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).
16. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
17. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

RECORDKEEPING AND REPORTING CONDITIONS

18. DPW&P shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the PCB cleanup and the analytical sampling shall be established and maintained by DPW&P in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
19. DPW&P shall submit a final report to the EPA within 60 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of and the size of the decontaminated area(s); bills of lading; copies of manifests; and, copies of certificates of disposal or similar certifications issued by the disposer.
20. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527
21. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1